

Lead in Drinking Water

Rev. 8/16/02
DOH PUB. # 331-177

How Lead Gets Into Water

Lead in drinking water most often comes from water distribution lines or household plumbing rather than from the water system source. Lead from other sources can add to the effects of lead in water.

Health Issues

Because the nervous and circulatory systems in young children are not fully developed, lead and other toxic substances can easily enter the brain. Long-term exposure to even low levels of lead can cause irreversible learning difficulties, mental retardation, and delayed neurological and physical development. Infants and children up to six years old are most susceptible to these toxic effects.

Pregnant women who have been exposed to lead can pass the effects to their unborn child. Exposure for adults primarily affects the peripheral nervous system and can cause impairment of hearing, vision, and muscle coordination. Lead is also toxic to the blood, kidney, heart, and reproductive system.

Lead poisoning is a particular problem because there may be no unique signs or symptoms associated with lead exposure. Early symptoms of lead poisoning may include loss of appetite, fatigue, irritability, anemia and, sometimes, abdominal pain. Because of the general nature of symptoms at this stage, lead poisoning is often not suspected.

Measuring Lead In Drinking Water

Lead may be present in your home drinking water if:

- There are lead pipes, brass fixtures, or connectors in your home or community water system, or
- Lead solder was used on your home water pipes, and
- You have soft water (low mineral content), or acidic water.

The only way to know the amount of lead in your household water is to have your water tested by a certified laboratory. The State Public Health Laboratories, 1610 Northeast 150th Street, Shoreline, Washington 98155, can perform this analysis. For information about collection of samples and shipping procedures, contact them at 206-361-2898. Testing for lead costs about \$33 per sample. For the names of other certified drinking water laboratories, call the Division of Drinking Water at 1-800-521-0323.

Reducing Exposure To Lead

Ways to reduce lead in home drinking water:

- If water has not been used in a particular faucet for six hours or longer, run the cold water tap until the water is noticeably colder -- about one minute -- to "flush" the pipes. The more time



water has been sitting in your home's pipes, the more lead and other dissolved metals the water may contain.

- Use only cold water for drinking, cooking, and making baby formula. Hot water may contain higher levels of lead.
- Frequently clean the screens and aerators in faucets to remove captured lead particles.
- If building or remodeling, only use "lead free" piping and materials for plumbing.

Drinking Water Regulations

- In May 1991, the United States Environmental Protection Agency finalized regulations for maximum lead content in public drinking water systems, which include:
- Maximum contaminant level goal of zero for lead.
- Treatment technique requirement for lead reduction.
- Requirement to treat source water when 10 percent of samples collected from customer's household water exceed the 0.015 parts per million (ppm) action level.
- Public education requirements as a compliment to treatment techniques.

For More Information

Washington State Department of Health (DOH):

Drinking Water Southwest Regional Office: 360-664-0768

Drinking Water Northwest Regional Office: 253-395-6750

Drinking Water Eastern Regional Office: 509-456-3115

General Information: 1-800-521-0323

Division of Drinking Water: <http://www.doh.wa.gov/ehp/dw>

DOH Childhood Lead Poisoning Prevention Program: 1-800-909-9898